Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

Contribution to the Myxogasters of Maine.

By F. L. Harvey.

The following list includes all the species of slime-moulds known by the writer to have been collected in Maine.

Species recorded by Saccardo, Massee and Lister are noted. We have had accesses to Sprague's lists; the collections in the Port. S. N. H. determined by Cooke and Berkeley, a list of Maine fungi collected by Rev. J. Blake, specimens in the Blake Herbarium of the Maine State College; and a list of specimens collected at Rangely and Bar Harbor by Dr. Rex. The specimens collected by the writer have all been examined by either Wingate, Peck, Ellis, Rex or Morgan, or carefully compared with authentic specimens. We will be glad to know of additional references or the names of past or present Maine collectors of these forms. The list is by no means exhaustive, as each year brings to light new and interesting forms. Dr. Rex said " your second sending contains an unusual number of interesting forms and suggests that there may yet be many treasures found."

We are under great obligations to the above named specialists, especially to Mr. Wingate, from whom came the original inspiration to study and collect these forms, and to Dr. Rex for many kind letters and the determinations of specimens, and since his death to Mr. Morgan for similar favors. We have followed the order of genera given in Lister's recent monograph.

MYXOMYCETES OF MAINE.

ORD. CERATIOMYXACEAE.

1. *Ceratiomyxa mucida* Schroet.=*Ceratium hydnoides* Alb. & Schw. Common on rotton wood. Orono ; Greenfield (Harvey).

ORD. PHYSARACEAE.

2. *Badhamia hyalina* (Pers.) Berk. In Blake Herb. as *Physarum hyalinum* Pers. Cumberland (Blake).

3. *B. utricularis* (Bull.) Berk. Low ground on prostrate logs. Orono, Oct. (Harvey).

4. *B. macrocarpa* (Ces.) Rost. Common in low ground on logs. Orono, Oct. (Harvey).

5. *B. fasciculata* (Jungh.) Rost. On bark of dead gray birch on ground in a swamp. Orono (Harvey).

6. *Physarum Petersi Farlowii* Rost. (*P. globuliferum* Pers. according to Lister.) Under bark of a standing birch. Orono (Harvey).

7. *P. viride* Pers. Under this head we put *Tilmadoche viridis* and *T. mutabilis*, both from Rangely (Rex).

8. *P. didermoides*. Port. S. N. H. Coll. no. 55 as *Didymium congestum* B. & Br. (Fuller).

9. *P. cinereum* (Batsch) Pers. Rangely (Rex).

10. *P. contextum* Pers. Rangely (Rex). Orono (Harvey).

11. *P. sinuosum* (Bull.) Rost. Rangely (Rex). *P. bivalve* of Lister.

12. *P. penetrale* Rex. Rangely (Rex).

13. *P. leucophaeum* Fr. Rangely (Rex). Orono (Harvey). 1889. Lister makes this *P. nutans* var. *leucophaeum*. Rex says " specimens well marked with a large central vesicular granule of lime.

14. *P. nutans* Pers. Herb. Port. Soc'y, no. 32 (Fuller). Harrison (Blake). Rangely (Rex). Orono (Harvey). Our specimens are *Tilmadoche nutans* Rost.=*P. nutans* var. *genuinum* List.

15. *P. Ditmari* Rost. Rangely (Rex).=*P. virescens* Ditm.

16. *P. citrinellum* Pk. Greenfield, Oct., 1895 (Harvey).=*Craterium citrinellum* Lister.

17. *Fuligo septica* Gmelin. Rangely (Rex). Orono & Greenfield (Harvey). Specimens collected at Greenfield, September, 1895, were infested by the rare fungus *Hypomyces violaceus* (Fr.) Tul. The aethalia vary in color and size. The shades are brown, yellow and white. Some aethalia are nearly 3 in. across. We have found specimens 3 ft. from the ground on the side of living trees.

18. *Craterium leucocephalum* Ditm. Rangely (Rex). *Craterium citrinellum* Lister is recorded as *Physarum citrinellum* Pk. See this list No. 16.

19. *Leocarpus fragilis* (Dicks.) Rost. Herb. P. S. N. H. no. 21, as *Diderma vernicosum* Pers. (Fuller). Rangely (Rex). Orono, September to November (Harvey) =*L. vernicosus* Link, of Lister.

20. *Condrioderma testaceum* (Schr.) Rost. Rangely (Rex).

21. *C. Michelii* Rost. Rangely (Rex). These specimens were the sessile variety.

22. *C. aculeatum* Rex.=*C. Sauteri* Rost. Bar Harbor (Rex).

23. *Diachaea elegans* Fries. Herb. P. S. N. H. (Fuller). Rangely (Rex).

24. *D Thomasii* Rex. This is spoken of by Lister as having been collected by Prof. Thaxter at "*Killery*," U. S. A. Probably Kittery, Me., is meant.

ORD. DIDYMIACEAE.

25. *Didymium Clavus* Rost. Rangely (Rex).

26. *D. farinaceum* Schrad. Rangely (Rex). Orono (Harvey).

27. *D. microcarpon* Fr. Herb. P. S. N. H. as *D. nigripes* Fr. (Fuller). Cumberland (Blake). Bar Harbor and Rangely (Rex).

28. *D. Xanthopus* Fr. Wells (Blake).

29. *D. proximum* B. & C. Beech woods, Orono (Harvey).

30. *D. eximum* Pk. Orono (Harvey). The four preceding species are united by Lister as *D. nigripes* Fries, and varieties.

31. *D. effusum* Link. Rangely (Rex).

ORD. STEMONITACEAE.

32. *Stemonitis fusca* Roth. Otisfield (Blake). Rangely (Rex). Orono and Oldtown (Harvey).

33. *S. herbatica* Pk. On fallen trunks. Greenfield, Oct. (Harvey).

34. *S. ferruginea* Ehrenb. Rangely (Rex). Orono, Aug. (Harvey).

35. *S. Smithii* Macbride=*S. microspora* List. Greenfield, Sept 1895 (Harvey).

36. *Comatricha typhoides* Rost. Port. S. N. H. Coll., no. 94 (Fuller). Rangely (Rex). Orono (Harvey).

37. *C. obtusata* Preuss. Sprague's N. Eng. Myc., p. 318 (Morse), as *Stemonitis ovata* Pers. Bar Harbor (Rex). A single very fine cluster was found at Orono by my son, Bartle Harvey, upon a decaying spruce timber from a barn.

38. *C. longa irregularis* Lister. Our specimens were named by Rex as *C. irregularis* Rex. Greenfield, Oct. Other specimens collected at Oldtown, September, 1895, were submitted to Morgan, who named them *C. crypta* Schw.

39. *Lamproderma physarioides* Rost. Rangely (Rex). Greenfield, September, 1895 (Harvey).

40. *L. columbinum* (Pers.) Rost. Greenfield, October, 1894. On moss covering a log, in fine development (Harvey).

Regarding this form Mr. Morgan made the following note: "It corresponds exactly to what Rostafinski describes as *Lamproderma columbinum* (Pers.) Rost. Lister and Massee have made very bad work of this genus, so that the students in this country using their volumes can scarcely tell what to do with their specimens. I was influenced by Lister in this genus, but after the publication of his volume I am disposed to fall back on Rostafinski. Lister combines this species with *L. physaroides* A. and S. This I think is not correct. The old writers describe them as distinct, one with a silvery sheen and the other with a steel blue luster. Both have long stipes. I think Rostafinski is correct in allowing them to stand as two good and distinct species. It is more like *L. violaceum* Fr., having, however, a much larger stipe."

41. *L. violaceum* Rost. Greenfield, 1895 (Harvey).

42. *L. arcyrioides* (Somm.) Rost. Rangely (Rex). Lister puts this under *L. violaceum* Rost.

ORD. AMAUROCHAETACEAE.

43. *Amaurochaete atra* Rost. Herb. P. N. S. H. as *Reticularia atra* Fr. Maine (Fuller).

ORD. HETERODERMACEAE.

44. *Lindbladia tubulina* Fries. Cumberland (Blake) as *Licea spermoides* B. & C.

45. *Cribraria intricata* Schrad. Rangely (Rex).

46. *C. tenella* Schrad. Bar Harbor (Rex).

47. *C. purpurea* Schrad. On decaying logs, Greenfield, Oct. (Harvey).

48. *Dictydium umbilicatum* Schrad. Rangely (Rex) as *D. cernuum* Pers.

ORD. LICEACEA.

49. *Licea fragiformis* Fr. Cooke's Hand Book, 1: 408. Cumberland (Blake). This form is noted in Blake's list. It is not recorded by Saccardo or Lister, and we have not been able to trace the synonymy. It may be *Tubulina cylindrica* (Bull.) DC., as Saccardo records *L. fragiformis* Nees as a synonym of this species.

50. *L. minima* Fr. Sacc. 7: 405. Cumberland (Blake). The

specimens in the Blake Herb. bearing this name were mounted on a sheet without protection and are in bad shape. They were determined for Blake by Cooke and were probably correct. Saccardo questions whether this species belongs to the genus *Licea*, while Lister makes it a good species.

51. *Orcadella operculata* Wing. Proc. Phil. Acad. 1889: 280. Trunks of living red oaks, Me. (Wingate.)

ORD. TUBULINACEAE.

52. *Tubulina fragiformis* Pers. Very common on hemlock stumps and logs and other situations. Rangely (Rex). Orono, Greenfield, Oldtown, Jackman, Norcross, etc. (Harvey).

ORD. RETICULARIACEAE.

53. *Enteridium Rozeanum* Wing. On charred fallen trunks Chemo Pond, Bradley (Harvey).

ORD. TRICHIACEAE.

54. *Trichia fallax* Pers. As *T. clavata* Wig. in Port. N. H. Coll. no. 19, Fuller. Rangely (Rex.). Orono (Harvey).

55. *T. varia* Pers. Rangely (Rex.). Orono, 1889, Sept. Greenfield, Sept., 1895 (Harvey). Rex. says, " This is peculiar in the elongated sporangium, terminating in a hollow stipe, like *T. fallax*. I have never seen anything like it in *T. varia* before.

56. *T. varia sessilis* Rost. Cumberland (Blake). Orono (Harvey). Lister does not recognize this variety.

57. *T. chrysosperma* (Bull.) DC.= *T. favoginea* Pers. Herb. Port. S. N. H. Coll. no. 18 (Fuller) Rangely (Rex.), Greenfield, Sept., 1895 (Harvey).

58. *T. Jackii* Rost.= *T. persimilis* Karst. Greenfield (Harvey). Rex says of my specimens that they are " strongly marked."

59. *T. scabra* Rost. Rangely (Rex). Orono and Oldtown, September, 1895 (Harvey).

60. *T. inconspicua* Rost. Rangely (Rex). Orono (Harvey). Lister regards this as *T. contorta* Rost.

61. *T. contorta* Rost. Orono (Harvey). Rex says my specimens are good examples of this species.

62. *T. reniformis* Pk. Orono (Harvey). Rex says, " This is typical according to a specimen of the type sent me by Próf. Peck."

Later, Rex says this seems really to be a form of *T. contorta*. Lister includes it in the above species.

63. *T. abrupta* Cooke, Grev. 5 : 150. Cooke B. Myx. 256 (Portland). Lister refers this form to *T. persimilis* Karst.

64. *T. subfusca* Rex. Jackman (Harvey), Sept., 1895. Lister makes this var. *subfusca*, under *T. Botrytis*. Morgan says, "The stipe is much shorter than the type I have from Dr. Rex, and the elaters are remarkably branched."

65. *T. affinis* De Bary. Greenfield (Harvey), Sept., 1895.

66. *T. nana* Mass. Westbrook (?). According to Lister this is the same as *Hemiarcyria Wigandii* Rost., a form which we record under that genus from Orono.

67. *Oligonema nitens* Rost. Orono, Sept., 1889. Greenfield, 1893 (Harvey). Our specimens are finely developed.

68. *Hemiarcyria* (*Hemitrichia*) *rubiformis* (Pers.) Rost. Cumberland (Blake). Rangely (Rex). Orono (Harvey).

69. *H. clavata* (Pers.) Rost. Common on fallen trunks. Sept. to Nov. Rangely (Rev). Orono, Greenfield (Harvey).

70. *H. serpula* (Scop.) Rost. Bar Harbor (Rex).

71. *H. Wigandii* Rost. Orono, Oct.; 1892 (Harvey). Rex says, "This has not been recorded from America before. It answers the description well, except that the spore and thread measurements are less." Lister refers *Trichia nana* Mass. which is reported from Westbrook, Me., to this species.

72. *H. leiocarpa* Rost. On vegetable debris. Portland (Bolles). Grev. 5 : 150.

73. *H. stipata* Schw. Orono, Oct. '90, Oldtown, Sept. '95 (Harvey). Rex says of the specimens collected in 1890, "That I have specimens in abundance of this species from several localities in this country, but yours has the most strongly marked capillitium. It is valuable for that reason." Lister refers this to *Arcyria stipata* Lister.

74. *H. plumosa* Morgan. On fallen trunks. Sept. 1895, Oldtown (Harvey). Lister makes no mention of this.

ORD ARCYRIACEAE.

75. *Arcyria punicea* Pers. Bar Harbor and Rangely (Rex). Orono and Oldtown (Harvey).

76. *A. cinerea* (Bull.) Schum (*A. albida* Pers). Rangely (Rex). Orono and Jackman (Harvey).

77. *A. adnata*, Batsch=*A. incarnata* Pers. Cumberland (Blake). Rangely (Rex). Orono and Oldtown (Harvey).

78. *A. nutans* (Bull.) Grev. Orono, Greenfield, Jackman (Harvey).

79. *A. aurantiaca* Rounk. On decayed pine boards. Orono, Oct., 92 (Harvey). Our specimens were determined by Dr. Rex. Lister says the description clearly refers to *A. ferruginea.*

80. *A. OErstedtii* Rost. Rangely (Rex).

81. *A. minor* Schw. Greenfield, 1895 (Harvey). Lister does not mention this.

82. *A. ferruginea* Saut. In low ground. In large masses several inches square, upon the under side of a decorticated log. Orono, Oct., 1893 (Harvey).

Dr. Rex makes the following note on this species: "This is an exceedingly interesting specimen to me, partly because it is the first American specimen I have seen, and partly from its variable thread sculpture. It is typical only in the central part of the capillitium. Both the basal and apical portions differ from my European types. Still I think it should be referred as above. I have compared it with authentic specimens of *A macrocarpa* Pk. Externally the resemblance is very great, but the capillitium is different, yet suggests your species in a few places. It seems to be one end of a series, of which *A. ferruginea* forms the other, and your specimens the central position. I should call your specimen an intermediate form between the above species, but referable rather to *A. ferruginea.*"

83. *Perichaena chrysosperma* Lister. This is reported from Rangely by Rex, as *Cornuvia Wrightii* Rost.

84. *P. depressa* Libert. Rangely (Rex.).

ORD. MARGARITACEAE.

85. *Dianema Harveyi* Rex. Our specimens are the type of this genus. They were obtained on decorticated poplar in a swamp near Orono, Sept., 1889. They have not been detected since the original gathering, though searched for carefully. The species may be regarded as rare.

ORD. LYCOGALACEAE.

86. *Lycogala miniatum* Pers.=*L. epidendrum* List. Very common. Cumberland (Blake). Rangely (Rex.). Orono (Harvey).

On a new Species of Scrophularia hitherto confounded with S. Marylandica.

BY EUGENE P. BICKNELL.

Two totally distinct species of *Scrophularia* are included under the name *Scrophularia Marylandica*, the common Figwort of the Eastern States. The true *S. Marylandica* is a late-flowering plant, beginning to bloom in the neighborhood of New York from the second to the fourth week of July, and continuing to bear flowers into late September or even October. The other species blooms in the spring and early summer—from about the middle of May until late June or early July. Its latest flowers are gone long before the earliest of *S. Marylandica* appear.*

It is not a little remarkable that this very noteworthy difference in the flowering-periods of these common plants should have remained so long undetected, and the fact readily explains why only a single species has been recognized; for, so close is the resemblance between these two figworts that, were their flowering periods identical, their distinctness would scarcely have been suspected. The case affords a striking illustration of extremely close general resemblance between species fundamentally distinct.

That I am not wrong in thus characterizing these plants will, I think, sufficiently appear from a comparison of their roots alone which exhibit notable differences both in morphology and in anatomical structure. It is to be especially remarked, also, that each plant has a characteristic odor distinctly different from that of the other.

It is a matter of curious interest now to recall the long-existing differences of opinion as to whether our *S. Marylandica*,

---

*Observations made the present season show that this general rule is not without exceptions. On July 7th, among an abundant growth of the early-flowering species on a shaded northern slope, three belated flowers were found; the same day some plants of *S. Marylandica* which had strayed from the woods into damp open ground showed their first flowers.